Individual Camouflage, Firing Techniques and Fighting Positions

Reference NWTC Cold Weather Operations Manual: C010 and Appendix C

Camouflage

Concealment by

blending in

with the natural

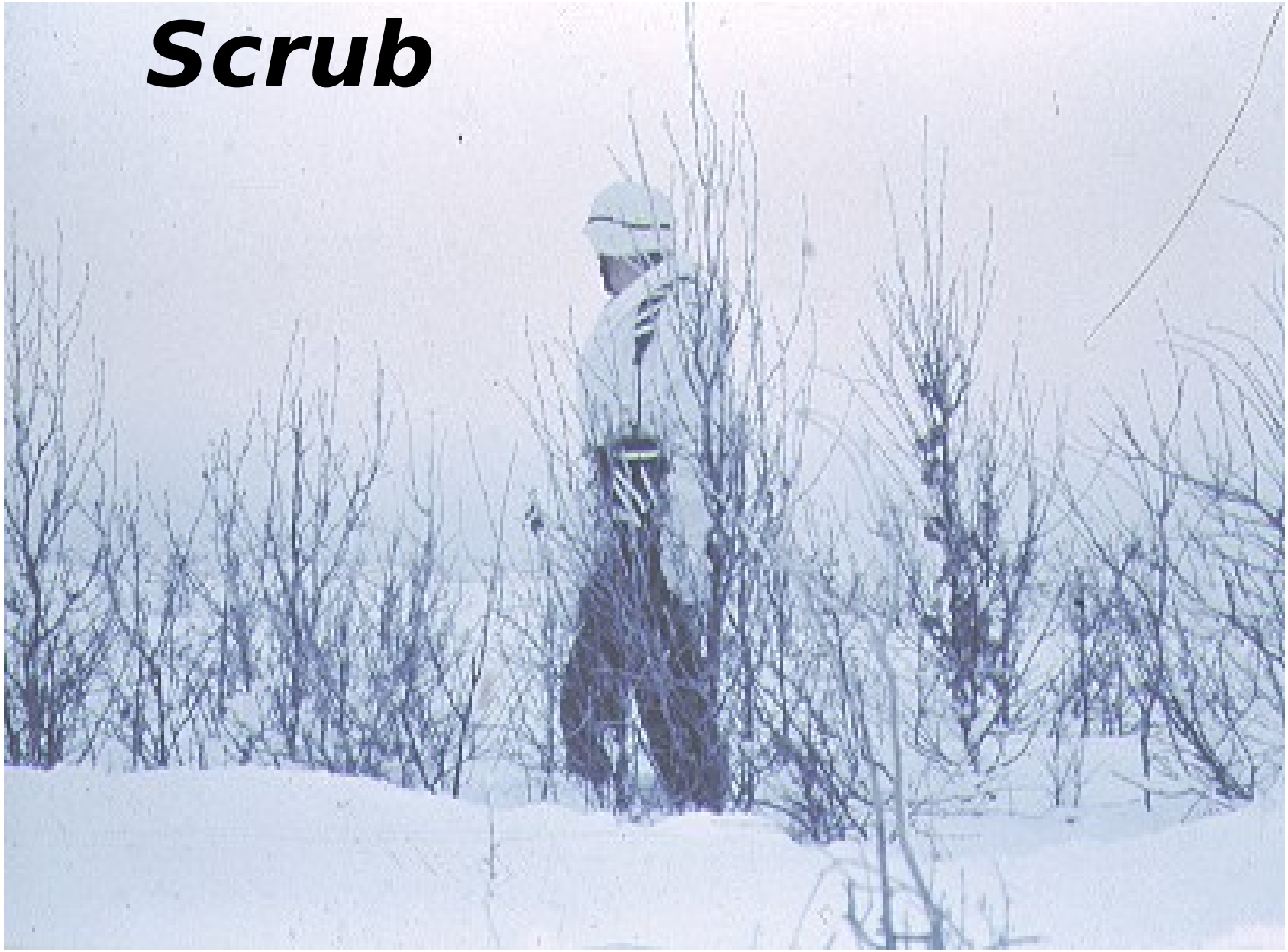
surroundings

Camouflage Combinations for Different Types of Terrain

- ***Thickly Wooded Area…….All Green***
- ***Low Brush or Light Scrub…White Parka and Green Trousers***
- ***On trails/roads……Green Parka and White Trousers***
- ***Above Treeline (open field)…All White***

Thickly Wooded Area

Low Brush/Light Scrub



On trails/roads

Open Field

What Can Be Used?

Individual Firing Techniques on Skis and Snowshoes

Standing Firing Position

Standing Snowshoes

Kneeling on Skis

Kneeling on Skis - Alternate Position

Kneeling on Snowshoes

Prone Firing Position on Skis

Prone with Snowshoes

Firing Platforms for Crew Served Weapons

Using a Snowshoe for a Firing Platform

Crew Served - Using Ahkio as a Support

Gunner and AG

Fighting Positions

Construction Materials

- ***Snow***
- ***Frozen soil***
- ***Ice***
- ***Stone***
- ***Timber***

Wet Snow

- ***Packs well and is easier to shape***
- ***Becomes stronger as it sets***
- ***Strongest when temperature decreases after construction***

Dry Snow

- ***Less suitable for expedient construction***
- ***Does not pack as well as wet snow***
- ***Generally takes a few hours to consolidate (after it is moved)***

Hard Packed Snow

- ***Wind moves snow and it consolidates into hard packed snow***
- ***Used for fortification and expedient shelters***

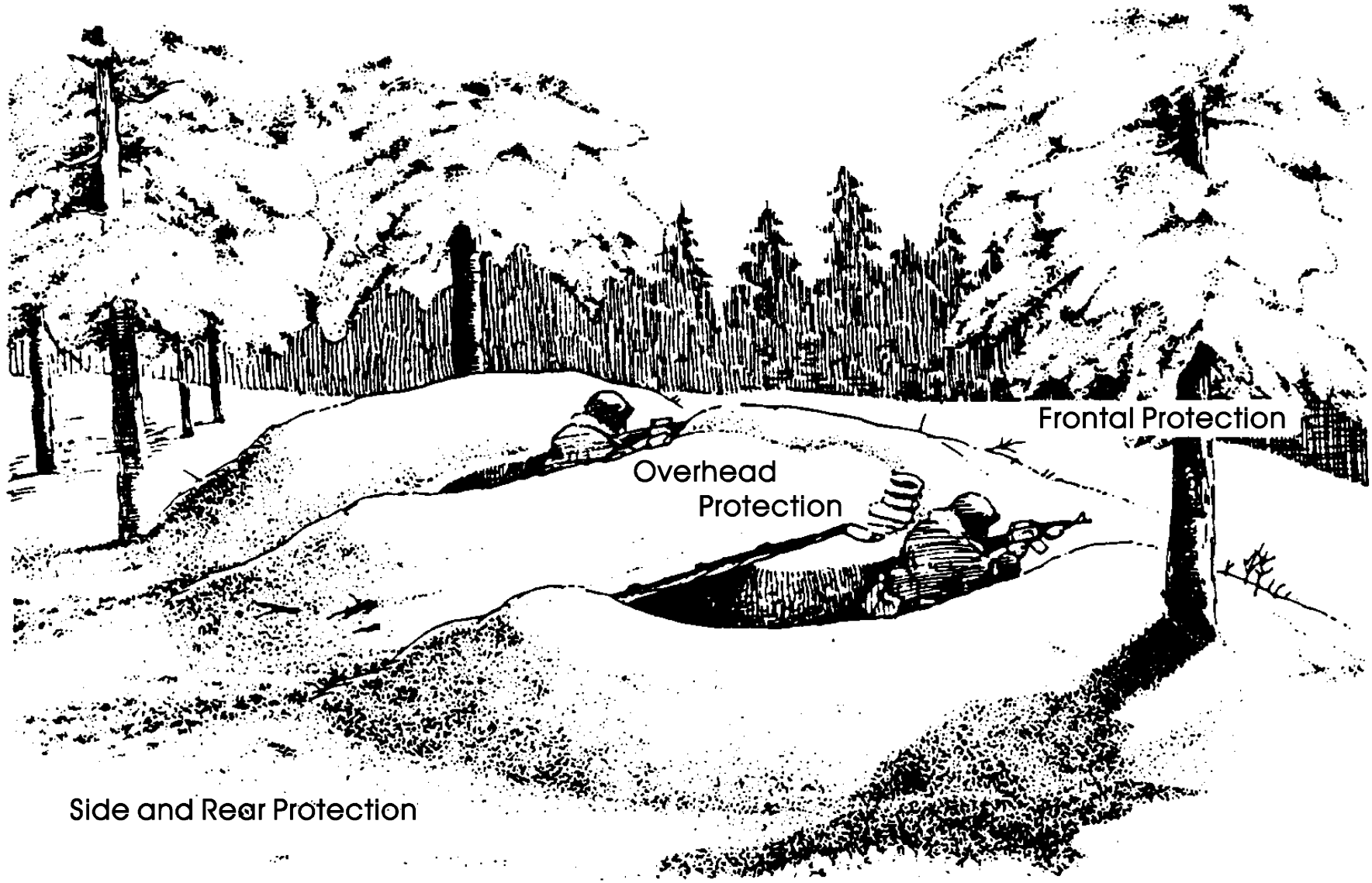
Ice Crete

- ***Mixture of soil, water, rock, gravel, sand, silt***
- ***Pour and tamp into forms***
- ***Properties of Portland cement; stronger than ice but it will generally melt faster***
- ***Cover with snow to delay meting and to camouflage***
- ***Use for above or below ground positions***

Small Arms Penetration Tables

Snow Characteristics	Feet	Centimeters
Newly Fallen Snow	13	400
Firmly Frozen	8-10	245-300
Packed Snow	6.5	200
Frozen Snow/Water Mixture	4-5	120-150
Ice	3.25	100
Ice Crete	1	30
NOTE: Based on penetration of a single 7.62 NATO round		

Below Ground Positions



Below Ground Positions

- ***Use conventional methods when frost line is one foot thick or less***
- ***If more than one foot thick, engineer support or demolition is required***
- ***Snow for camouflage and additional protection***
- ***Use timber for revetment***

Overhead Cover

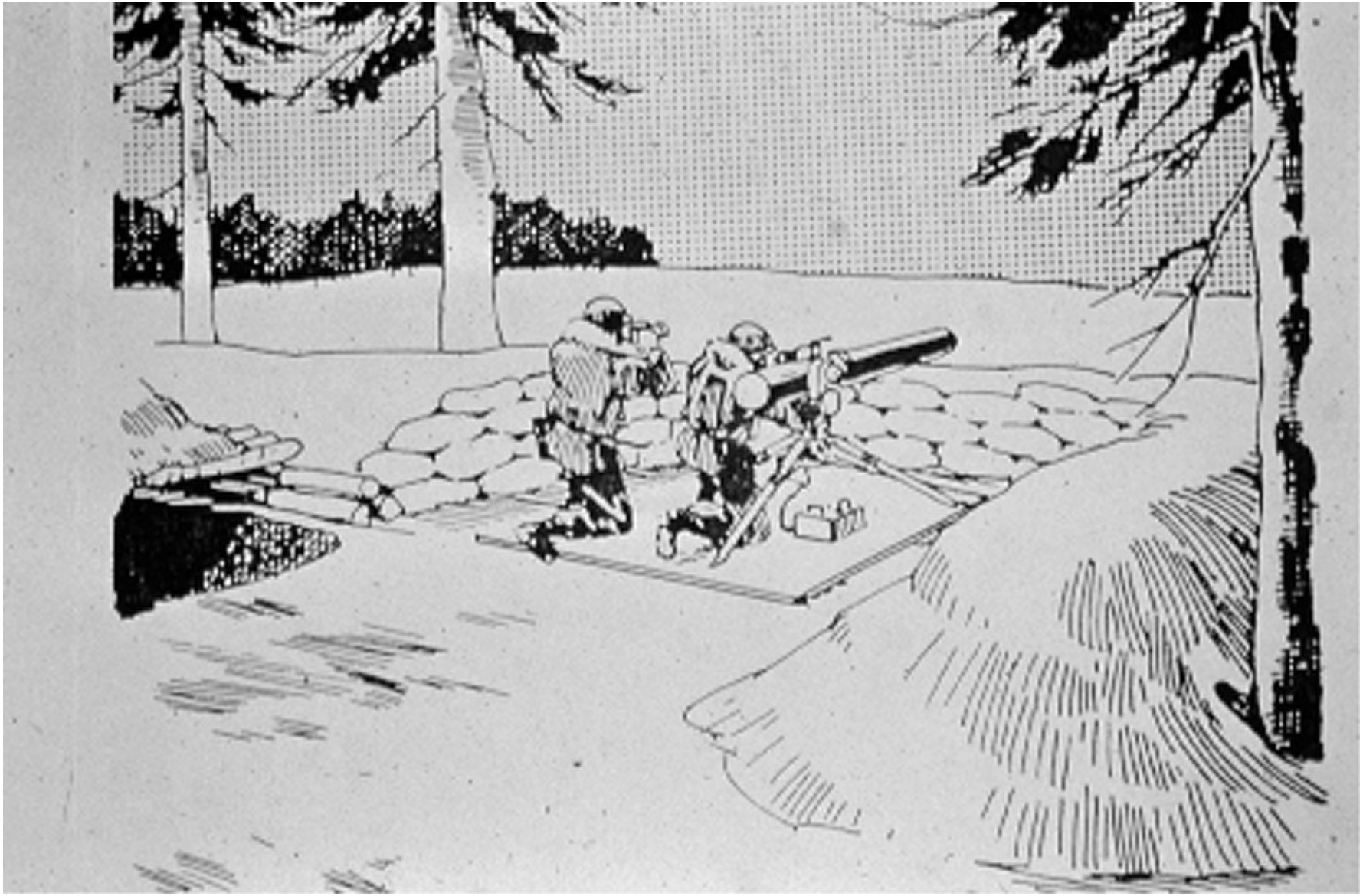
- ***Logs approximately 6 inches in diameter***
- ***3 feet of packed snow***
- ***Logs approximately 2 inches in diameter- bursting layer***
- ***Snow for camouflage***

Above Ground Fighting Positions

Above Ground Fighting Positions

- ***Used when frost line is greater than one foot thick and demo/engineer support not available; also used when little time is available***
- ***Dug as deep as possible***
- ***Parapets made of snow – 8-9 feet thick in front and 2-3 feet thick on sides***
- ***Parapets flat on top to deflect rounds***
- ***Reinforce parapets by adding sticks, twigs, etc. to the snow during packing***
- ***Snow bags or logs used for revetments for greater resistance to small arms and shrapnel***

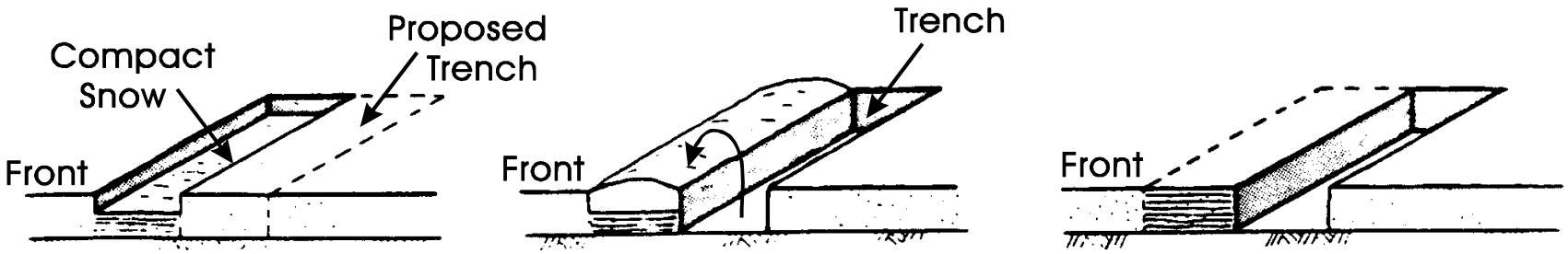
TOW / Machine Gun Position



TOW / Machine Gun Position

- ***Platform of plywood or timber***
- ***Parapets 8 to 9 feet***
- ***Side parapets 2 feet***
- ***Overhead cover offset to the rear***

Snow Trench



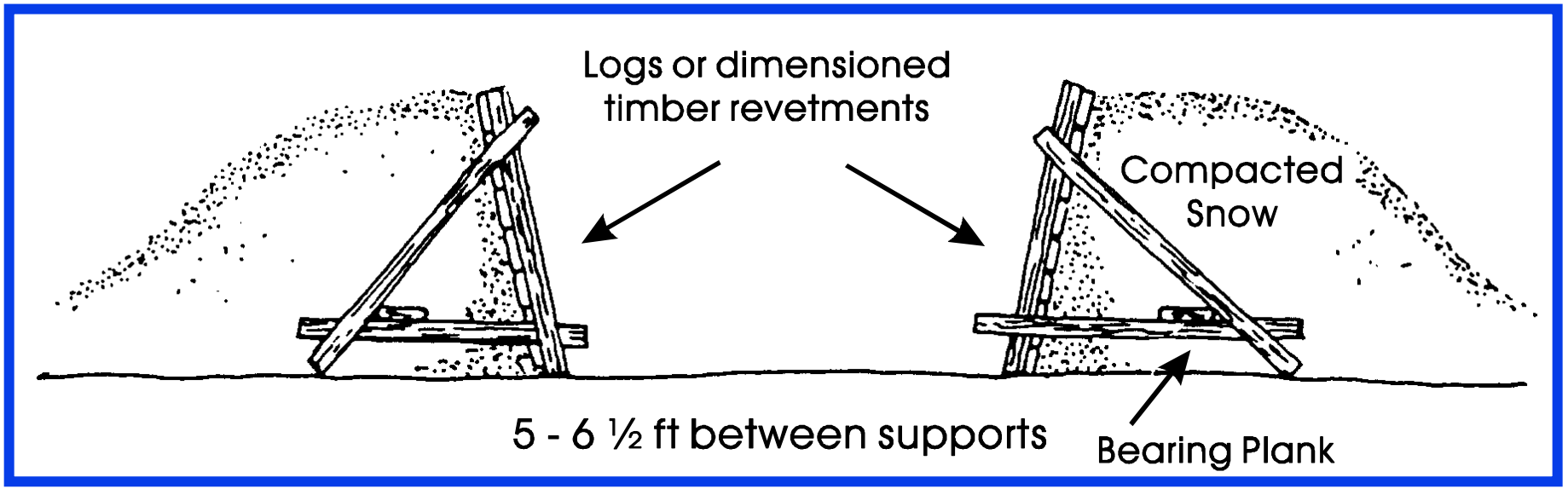
Step 1: Pack the snow in front of the trench.

Step 2: Place snow excavated from the trench in the packed snow.

Step 3: Smooth and level the packed snow.

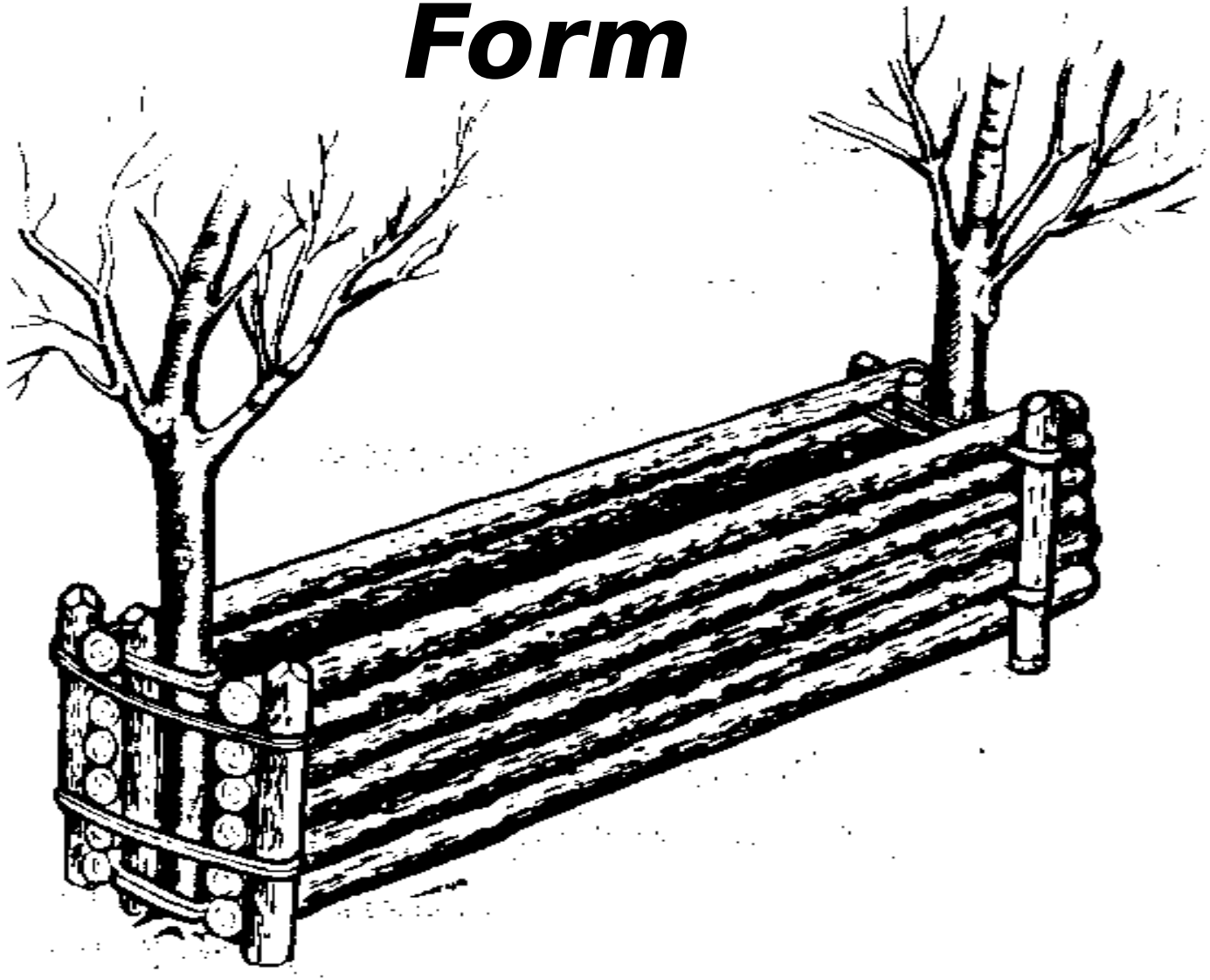
- ***At least two snowshoes wide***
- ***Pack snow in front of trench***
- ***Excavate the trench, placing snow to the front***
- ***Log or sandbag revetment can be used***

Snow Trench With Wood Revetment

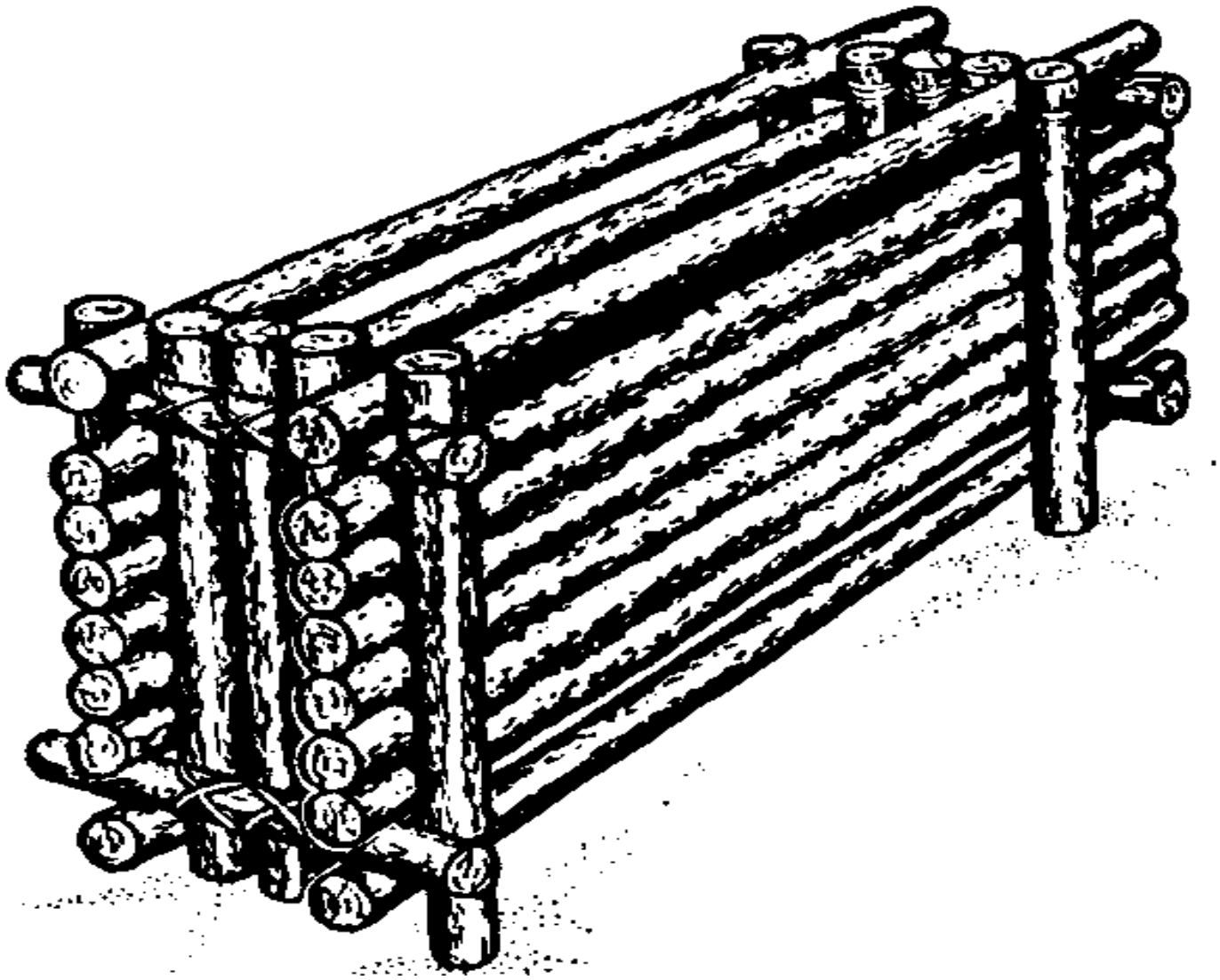


- ***Approximately 6.5 feet of packed snow***
- ***Snow trench dug armpit deep***
- ***Logs or timber used for revetment***
- ***Ensure a base platform is constructed for TOW and similar weapon systems***

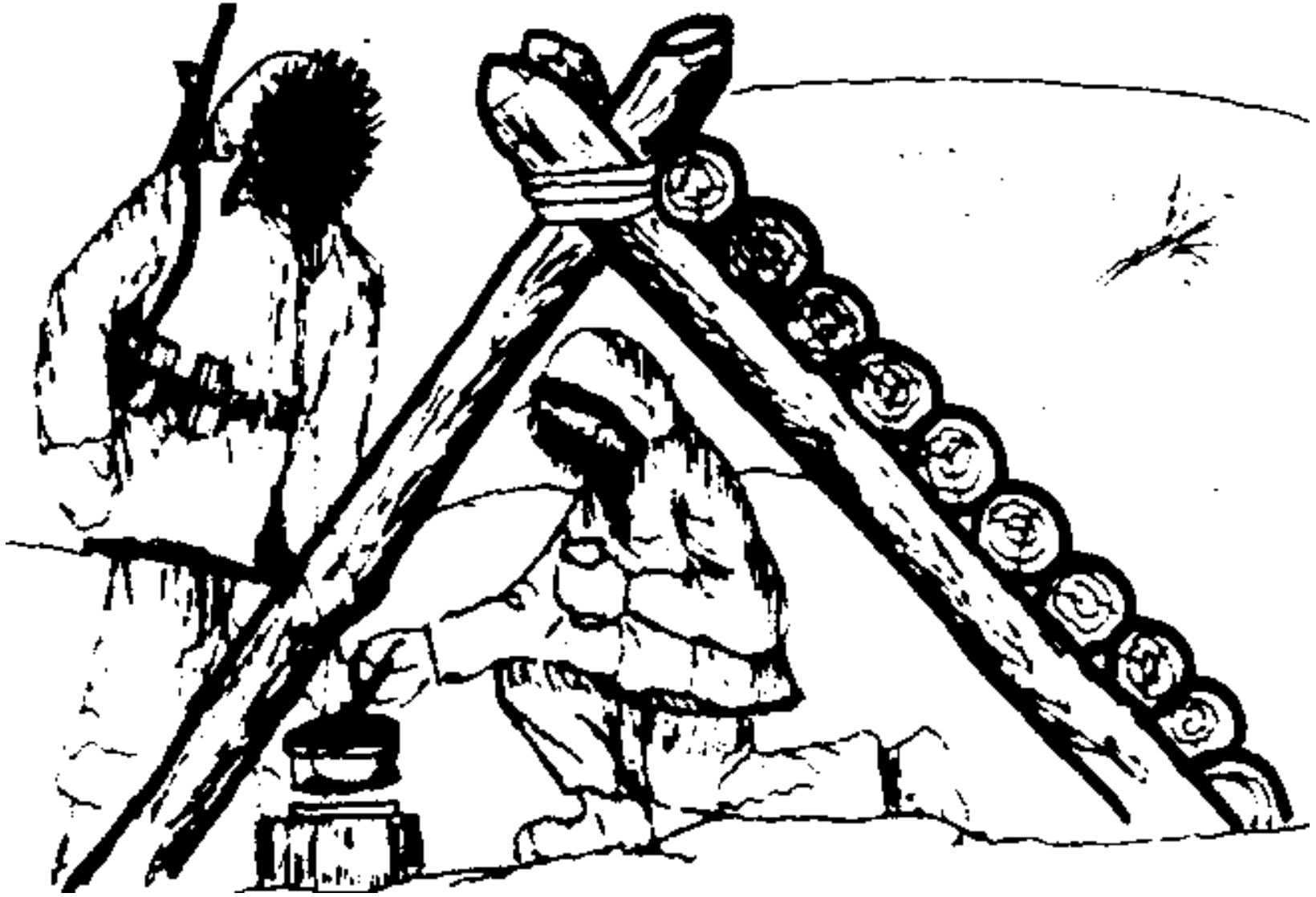
Tree and Log Form



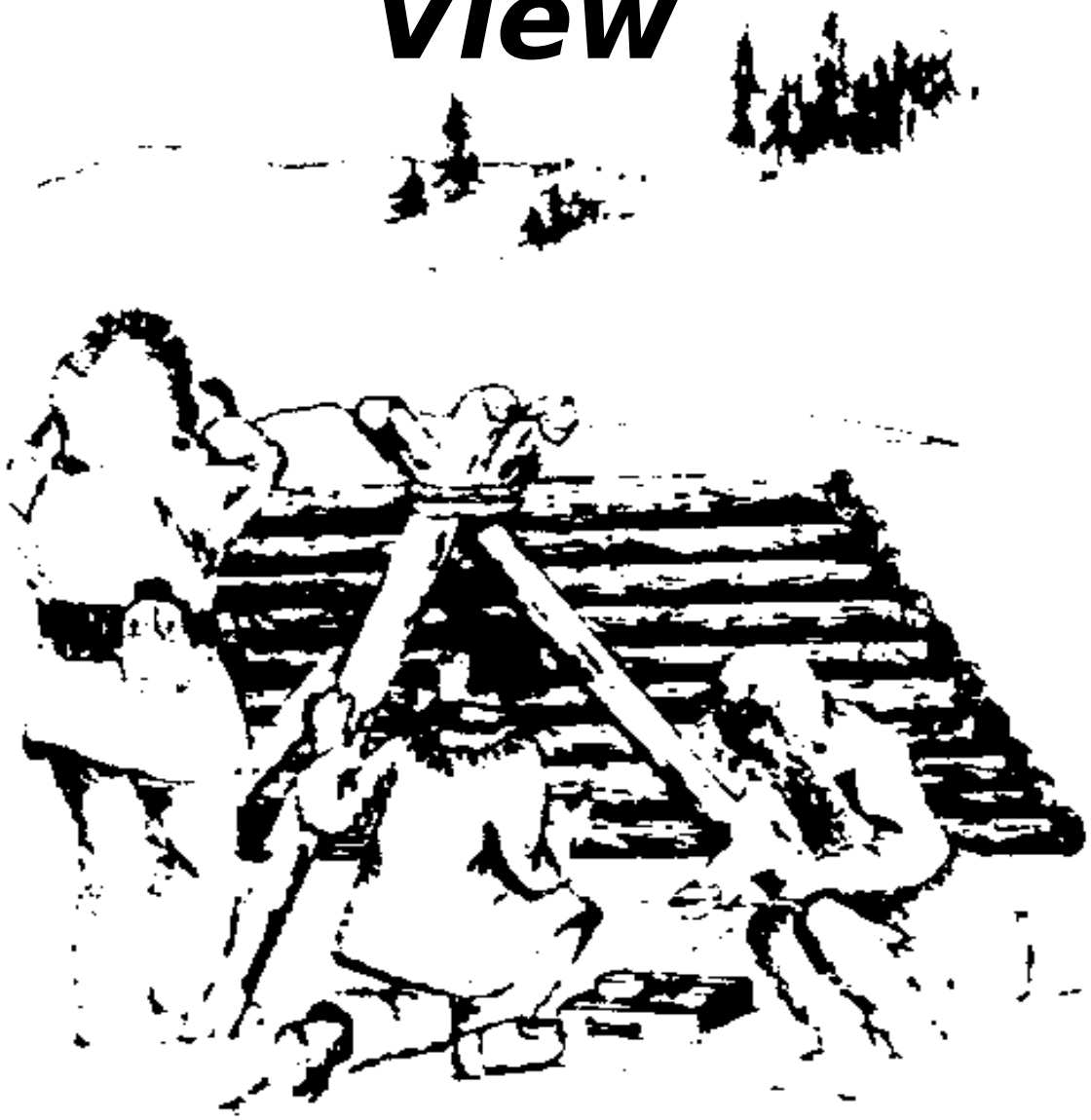
Log Form



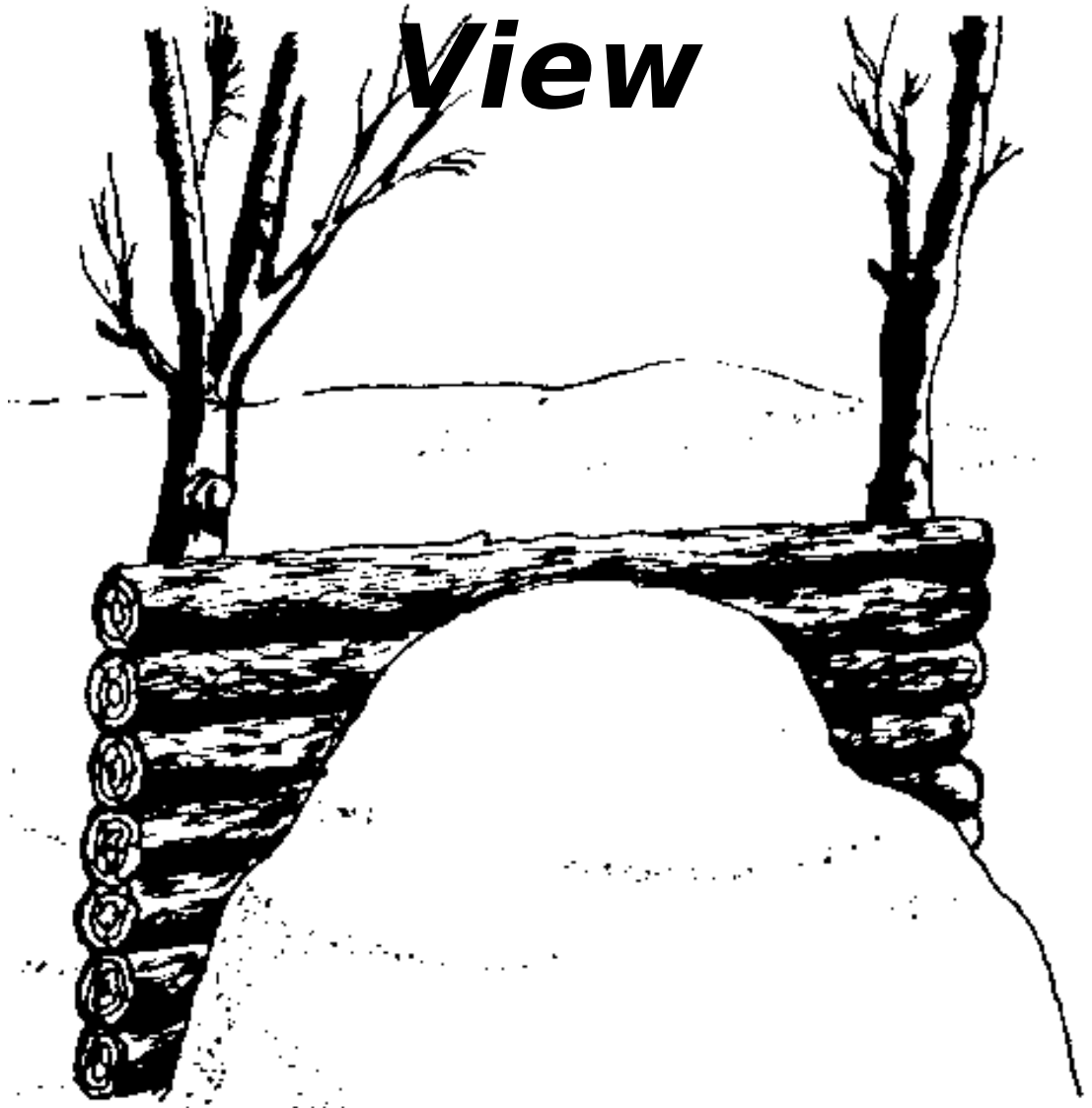
Tripod Supported Wall: Side View



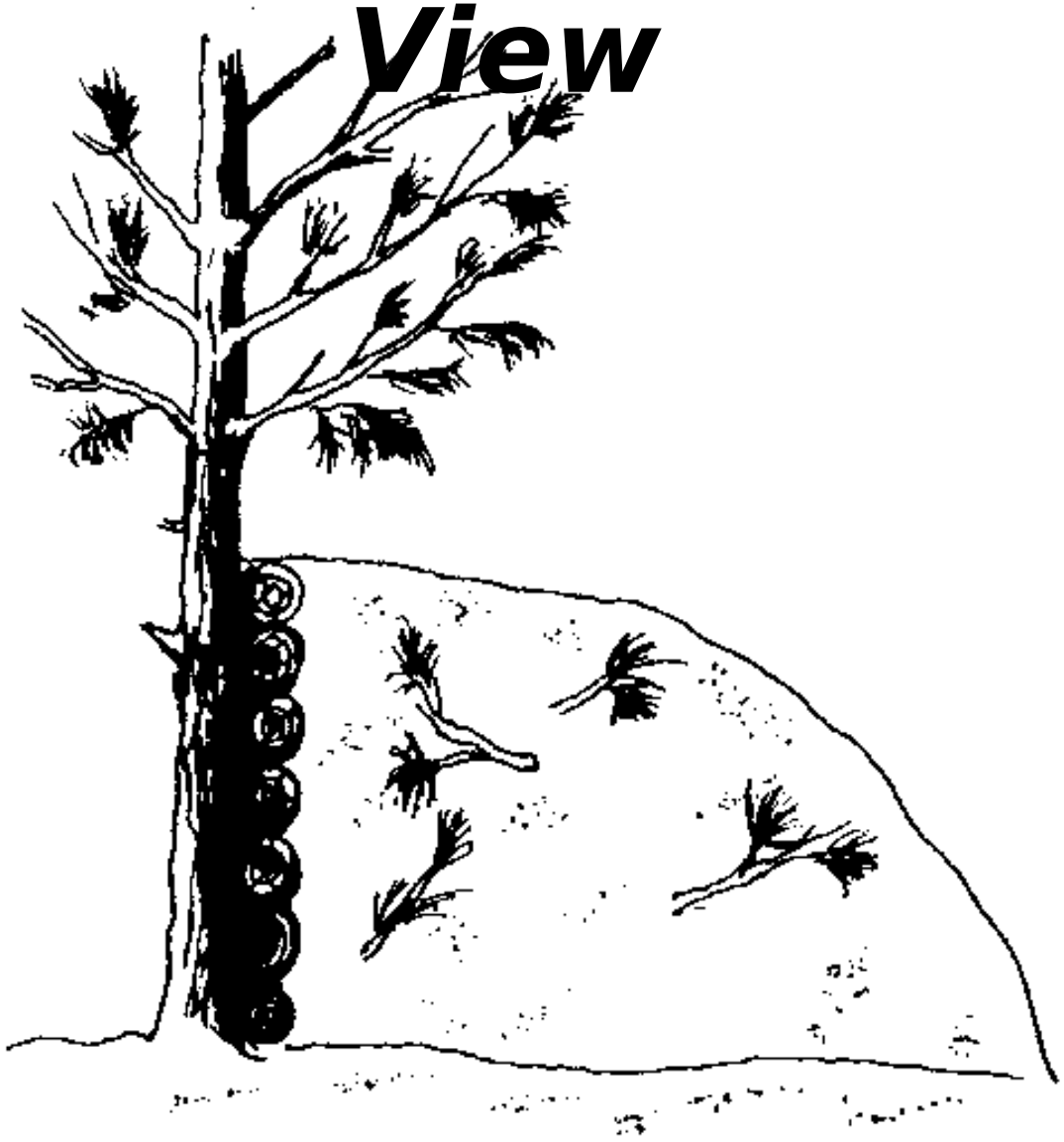
Tripod Supported Wall: Rear View



Tree Supported Wall: Oblique View



Tree Supported Wall: Side View



Summary